

**HP NetServer****LC 3**

specifications

## The rock-solid workgroup server that keeps your growing business up and running

The HP NetServer LC 3 is unmatched for manageability, availability, and performance by any other server in its class through this unique combination of features built into its core design:

### Manageability

- Integrated HP Remote Assistant
- HP Navigator for ease of installation
- HP TopTools for Servers Web-based device management
- HP OpenView ManageX/SE (Special Edition) for NOS and application management

### Availability

- Support for Microsoft® Cluster Server
- ECC memory and memory scrubbing
- Variety of disk array controllers to meet budget and performance needs
- Hot-swap drives
- One-Button Disaster Recovery with HP SureStore DDS backup accessories

### Scalable Performance

- Support for Pentium II and Pentium III dual processing
- I<sub>2</sub>O-ready system
- Upgrade path from HP NetServer LC II to HP NetServer LC 3

### HP's Commitment to Service

- Package fully designed by HP for easy access and quick serviceability
- Package design partitions key components to enable easy access to processor and I/O slots
- Optional service packets for higher levels of hardware and software support
- HP service available worldwide



As your business grows and your network needs become more critical, you need a server that can expand and be reliable so that you can trust it to run your business. HP NetServer LC 3 is engineered to deliver superior manageability, high availability, and performance wherever you install your next workgroup server.

## Features

Performance	
Processor	Up to 2 Intel Pentium II 400MHz, 450MHz or Pentium III 500MHz, 550MHz processors with 100MHz bus
Cache	512KB ECC L2 cache per processor
ECC Memory	<ul style="list-style-type: none"> <li>• 64MB high-performance 100MHz ECC SDRAM standard with memory scrubbing</li> <li>• 1GB maximum capacity</li> </ul>
I/O Expansion Slots	5 PCI (one occupied by preinstalled 10/100TX NIC) 1 PCI/ISA
Controllers	<ul style="list-style-type: none"> <li>• Integrated Ultra/Wide SCSI</li> </ul>
Mass Storage System Hot-Swap	<ul style="list-style-type: none"> <li>• 3 half-height hot-swap shelves, plus 1 half-height common tray shelf</li> <li>• 72.8GB maximum internal capacity, 54.6GB hot-swap</li> <li>• Optional external storage solutions</li> </ul>
Video	<ul style="list-style-type: none"> <li>• Integrated; supports 1024x768, 256-color resolution at 72Hz</li> <li>• 1MB standard video memory, upgradeable to 2MB</li> <li>• Super VGA drivers available with operating system</li> </ul>
CD-ROM Drive	24x Max IDE
Flexible Disk Drive	3.5" 1.44MB flexible disk drive
Built-in I/O Ports	<ul style="list-style-type: none"> <li>• One 25-pin parallel port</li> <li>• Two 9-pin Serial/RS-232 ports</li> <li>• Video port</li> <li>• Mini-DIN keyboard and mouse ports</li> <li>• Management port (9-pin)</li> </ul>
Keyboard and Mouse	Localized keyboard and two-button mouse

## Features

### Availability

Clustering	Support for Microsoft Cluster Server
Self-Restart Capability	<ul style="list-style-type: none"> <li>Automatic Server Restart (ASR) that reboots in the event of a NOS hang</li> <li>Temperature, voltage, and fan-speed monitoring</li> </ul>
Self-Correcting Memory	Manageable Error Checking and Correcting (ECC) system and cache memory
Hot-Swap Subsystem	<ul style="list-style-type: none"> <li>Supports 4.2GB, 9.1GB, and 18.2GB disk drives</li> <li>Supports high-performance 10,000rpm 4.2GB and 9.1GB disk drives</li> <li>Up to 54.6GB of hot-swappable internal storage</li> </ul>
Disk Array Controller	<ul style="list-style-type: none"> <li>Optional HP NetRAID-1 or HP NetRAID-3Si I<sub>2</sub>O disk array controller</li> <li>Supports RAID 0, 1, 3, 5, 10, 30, 50</li> </ul>
IPMI	Intelligent Platform Management Interface to simplify and standardize system communication for device management
Network Interface	Preinstalled 10/100TX network interface card with support for optional network interface card to support redundancy, load balancing, and Cisco® Fast EtherChannel®
One-Button Disaster Recovery	Simple and reliable data restoration with the world's first hardware-based One-Button Disaster Recovery solution

### Manageability<sup>1</sup>

Installation and Configuration	<ul style="list-style-type: none"> <li>HP NetServer Navigator with automated, menu-driven system setup and configuration</li> <li>Guided network operating system installation</li> <li>Automatic installation of monitoring tools</li> <li>IntranetWare from Novell distributed with every system (requires customer purchase for activation)</li> </ul>
Management Software	<ul style="list-style-type: none"> <li>HP TopTools for Servers, a comprehensive server management solution with intuitive browser-based user interface, facilitates troubleshooting, administration, and asset information collection</li> <li>Detailed inventory information provided through standard DMI 2.0 protocol</li> <li>Award-winning HP OpenView™ ManageX/SE for complete NOS and application management</li> <li>Easy integration with other leading network and system management products</li> </ul>
Remote Administration	<ul style="list-style-type: none"> <li>Integrated HP Remote Assistant provides emergency remote access with a single event log and expanded inventory data collection for faster troubleshooting</li> <li>Optional HP TopTools Remote Control card for remote LAN access and increased security</li> <li>File transfer capabilities for secure and easy remote updates</li> </ul>

### Expandability

Design Features	<ul style="list-style-type: none"> <li>Mezzanine design partitions key components and to provide easy access to memory, I/O slots, and CPU</li> <li>Vertically mounted electronics with suspension rails to improve access without requiring disassembly</li> <li>Easy-release processor cartridge</li> <li>Ample top and side access</li> <li>Rack-friendly design</li> </ul>
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<sup>1</sup> See HP NetServer Management Web site at [http://www.hp.com/go/netserver\\_mgmt](http://www.hp.com/go/netserver_mgmt)

## Features

### Flexibility

Supported Operating Systems	Microsoft® Windows NT®, Novell® NetWare® and IntranetWare™, SCO® OpenServer™ and UnixWare®, IBM® OS/2® Warp Server and Warp Server SMP, Banyan® VINES®, Linux
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### Security and Safety

System Security	<ul style="list-style-type: none"> <li>• Startup password</li> <li>• Power switch cover and keyboard lock button</li> <li>• Chassis intrusion alert</li> <li>• Provision for padlock</li> <li>• System lock and hot-swap hard disk drive lock</li> <li>• Enable or disable serial port, parallel port, flexible disk drive, and write operations to the flexible disk drive</li> </ul>
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### Service and Support

Warranty	3-year, next-business-day, onsite limited warranty from HP or authorized resellers (standard business hours) worldwide
HP SupportPack Options	<ul style="list-style-type: none"> <li>• Free telephone support for basic setup, installation, and troubleshooting in North America, Europe, and Asia Pacific during warranty</li> <li>• Optional HP SupportPack for 4-hour response during standard business hours</li> <li>• Optional HP SupportPack for 24 hours a day, 7 days a week</li> <li>• Optional HP SupportPack for 6-hour Hardware Call-to-Repair Commitment Service</li> <li>• Optional HP SupportPack for Comprehensive Technical Support</li> </ul>
Reseller Support Services	<p>Comprehensive reseller support framework to ensure successful support of HP NetServers includes</p> <ul style="list-style-type: none"> <li>• Proactive Notification e-mail service<sup>1</sup></li> <li>• Service and support Web site<sup>1</sup></li> <li>• Server management and hardware troubleshooting courses (STAR)<sup>1</sup></li> <li>• Troubleshooting Toolkit<sup>1</sup></li> <li>• 24x7 telephone support for authorized resellers</li> <li>• HP Business Builders blueprints for new business opportunities</li> </ul>

<sup>1</sup> See <http://www.hp.com/netserver/servsup> for details

## Features

### Regulatory Compliance

Electromagnetic Emissions	<ul style="list-style-type: none"> <li>• CFR 47 part 15, Class B: Self Declaration, C63.4 - 1992 (USA) <sup>1</sup></li> <li>• Industry Canada, ICES-003, CISPR 22, Class B (Canada) <sup>1</sup></li> <li>• EN 50081, EN 55022, Class B (EU Countries) <sup>1</sup></li> <li>• EN 55022, Class B (Eastern Europe (ISE) Countries) <sup>1</sup></li> <li>• M of C, Class A (Korea)</li> <li>• VCCI, CISPR 22 Class B ITE (Japan) <sup>1</sup></li> <li>• AS/NZS 3548 - EN 55022B (Australia/ New Zealand)</li> <li>• BCIQ, Class A (Taiwan)</li> <li>• GOST 29216 (Russia)</li> </ul>
Electromagnetic Immunity	<p>Generic Immunity (EN 50082-1, EU countries), including:</p> <ul style="list-style-type: none"> <li>• ESD, IEC-801-2:1984, 4KV Contact, 8KV Air</li> <li>• Radiated Immunity, IEC-801-3:1984: 3V/m, 80% AM Mod, 27MHz–1000MHz</li> <li>• EFT, IEC-801-4:1988 1.0KV Power, 0.5KV I/O lines</li> </ul>
Safety	<ul style="list-style-type: none"> <li>• UL 1950 (File E139742) (USA and Canada)</li> <li>• EN 60950 (International)</li> <li>• NOM (Mexico)</li> </ul>

<sup>1</sup> Class A for Pentium III 500MHz and 550MHz processors.

## Accessories

	Product Accessory <sup>1</sup>	Product No.
Memory	<ul style="list-style-type: none"> <li>64MB 100MHz ECC SDRAM DIMM</li> <li>128MB 100MHz ECC SDRAM DIMM</li> <li>256MB 100MHz ECC SDRAM DIMM</li> <li>1MB Video RAM</li> </ul>	D6097A D6098A D6099A D4219A
Processors	<ul style="list-style-type: none"> <li>Pentium II 450MHz, 512KB L2 cache</li> <li>Pentium III 500MHz, 512KB L2 cache</li> <li>Pentium III 550MHz, 512KB L2 cache</li> </ul>	D7032A D7129A D8583A
Internal Storage	<ul style="list-style-type: none"> <li>4.2GB Ultra/Wide SCSI disk drive (7,200rpm)</li> <li>9.1GB Ultra/Wide SCSI disk drive (7,200rpm)</li> <li>18.26GB Ultra/Wide SCSI disk drive (7,200rpm)</li> <li>9.1GB Ultra/Wide SCSI disk drive (10,000rpm)</li> <li>4.2GB hot-swap Ultra/Wide SCSI disk drive (7,200rpm)</li> <li>4.2GB hot-swap Ultra/Wide SCSI disk drive (10,000rpm)</li> <li>9.1GB hot-swap Ultra/Wide SCSI disk drive (7,200rpm)</li> <li>9.1GB hot-swap Ultra/Wide SCSI disk drive (10,000rpm)</li> <li>18.2GB hot-swap Ultra/Wide SCSI disk drive (7,200rpm)</li> </ul>	D4910A D4911A D7176A D7049A D3583C D4903A D4289A D6019A D5039A
Disk Controllers & SCSI Cables	<ul style="list-style-type: none"> <li>HP NetRAID-1 Disk Array Controller (1 channel)</li> <li>HP NetRAID-3Si I<sub>2</sub>O Disk Array Controller (3 channels)</li> <li>HP Ultra/Wide SCSI PCI Controller</li> <li>2.5m SCSI Cable to connect from HP NetRAID Family Controller to External Storage<sup>2</sup></li> <li>HP NetServer LC 3 Internal SCSI Cable Kit<sup>3</sup></li> </ul>	D4992A D5955A D5025A D6020A D5968A
External Storage Solutions	<ul style="list-style-type: none"> <li>HP NetServer Rack Storage/6</li> <li>HP NetServer Rack Storage/12 (Ultra2 SCSI)</li> <li>HP NetServer Rack Storage/12 SCSI Card</li> </ul>	D3604B D5989A D6025A
Backup Devices <sup>4</sup>	<ul style="list-style-type: none"> <li>Internal HP SureStore T20i Travan TR-5 tape drive</li> <li>Internal HP SureStore DAT8i DDS-2 tape drive</li> <li>Internal HP SureStore DAT24i DDS-3 tape drive</li> <li>Internal HP SureStore DLT 40i DLT 4000 tape drive</li> <li>External HP SureStore T20e Travan TR-5 tape drive</li> <li>External HP SureStore DAT8e DDS-2 tape drive</li> <li>External HP SureStore DAT24e DDS-3 tape drive</li> <li>External HP SureStore DLT 40e DLT 4000 tape drive</li> <li>External HP SureStore DAT24x6e DDS-3 Autoloader</li> </ul>	C4394A C1528J C1555C C5647A C4395A C1529J <sup>5</sup> C1556C <sup>5</sup> C5679A C1559B
Network Interface Cards	<ul style="list-style-type: none"> <li>HP NetServer 10/100TX PCI LAN adapter</li> <li>HP DeskDirect 10/100VG PCI LAN adapter</li> </ul>	D5013A J2585B

## Accessories

	Product Accessory <sup>1</sup>	Product No.
Remote Management	<ul style="list-style-type: none"> <li>Integrated HP Remote Assistant</li> <li>HP TopTools Remote Control card</li> <li>Optional AC adapter for HP TopTools Remote Control card</li> </ul>	Included D6028A D6138A
Uninterruptible Power Supply	UPS devices are available from American Power Conversion (APC). For additional information, contact your local APC reseller, or see APC's Web page at <a href="http://www.apcc.com">http://www.apcc.com</a> .	
Upgrades	<ul style="list-style-type: none"> <li>HP NetServer LC II to LC 3 upgrade kit<sup>6</sup></li> </ul>	D6135A
Monitors	<ul style="list-style-type: none"> <li>HP 50 15" Color Monitor</li> <li>HP M500 15" Color Monitor</li> <li>HP 70 17" Color Monitor</li> <li>HP M700 17" Color Monitor</li> </ul>	D2826A D2832A D2837A D2838A
Disk Tray	<ul style="list-style-type: none"> <li>3.5-inch hard disk drive mounting trays (3-pack, non-hot-swap)</li> <li>Tape/DAT/CD-ROM mounting trays (3-pack, no front panel)</li> <li>Hot-swap disk mounting tray (for selected third-party drives)</li> </ul>	D2198A D2199A D3349B
HP NetServer Racks <sup>7</sup>	<ul style="list-style-type: none"> <li>2-meter rack with side panels and rear door</li> <li>2-meter rack only</li> <li>HP NetServer LC II/LC 3 rackmount kit</li> </ul>	J1487B J1488A J1456B

### HP SupportPack Offering

Support can be delivered either by your local reseller or by the Hewlett-Packard Customer Support organization. For more information, visit our Web site at [www.hp.com/go/netserver](http://www.hp.com/go/netserver).

HP SupportPack	Order No.
3-year onsite support, 4-hour response (standard business hours)	H5519A
3-year onsite support, 4-hour response (24 hours/day, 7 days/week)	H5513A
3-year onsite support, Hardware Call-to-Repair Commitment service within a maximum of 6 hours	H1820A
Onsite installation and network configuration	H5751A
Comprehensive Technical Support	H1847A

<sup>1</sup> Please see the *HP NetServers Configuration Guide* for important technical information when choosing your accessories.

<sup>2</sup> 2.5m SCSI Cable 68-pin male ultra-high-density offset connector to 68-pin male high-density connector.

<sup>3</sup> Use in HP NetServer LC 3 when HP NetRAID Family Controller is used with internal storage.

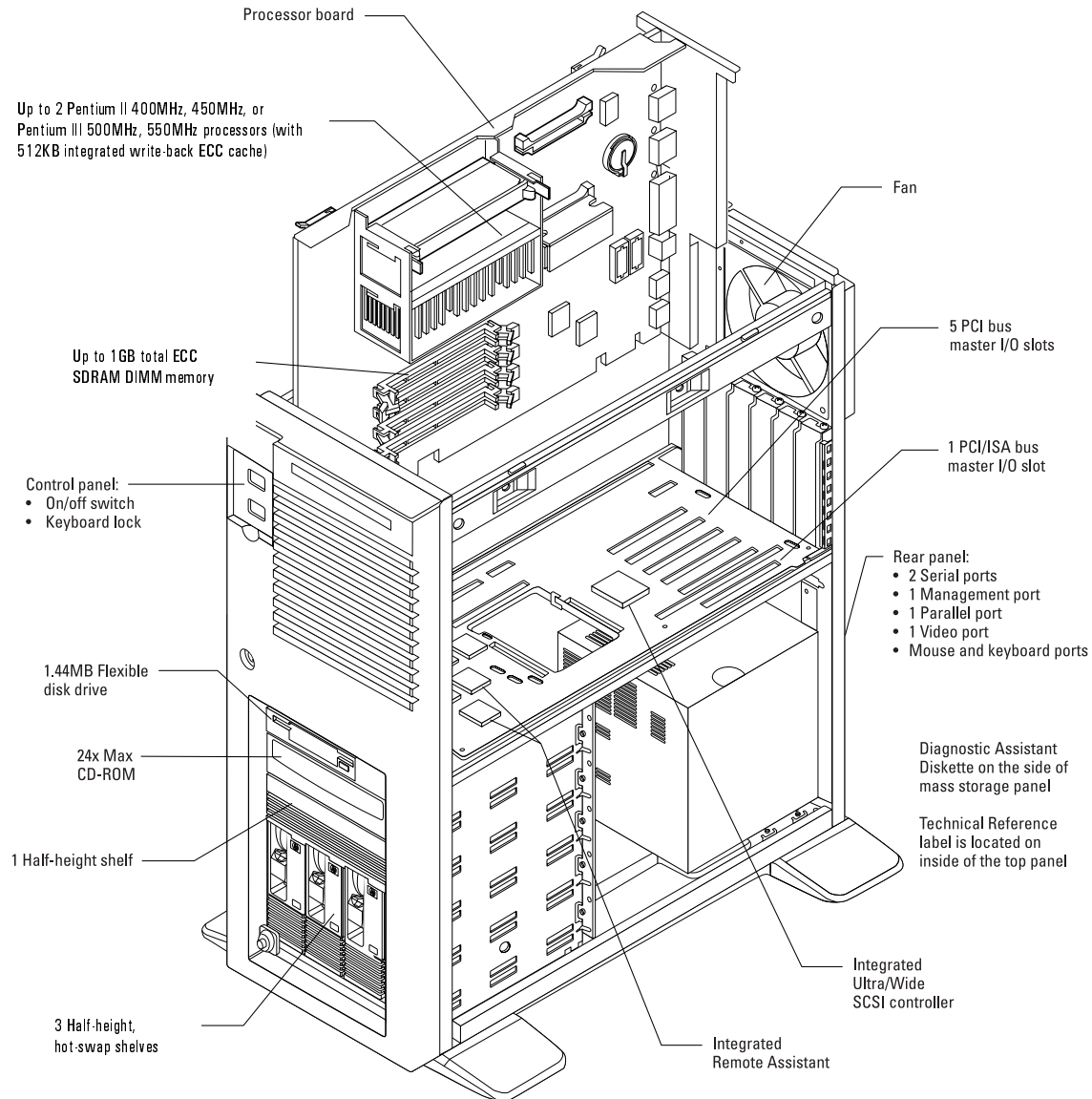
<sup>4</sup> HP SureStore offers a complete range of tape backup solutions for HP NetServers. For more information on HP SureStore tape backup products, please check the *HP NetServers Configuration Guide* or go to the HP SureStore Web site at <http://www.hp.com/storage>.

<sup>5</sup> One-Button Disaster Recovery will be available with these backup devices May 1, 1999.

<sup>6</sup> HP NetServer LC II to LC 3 upgrade kit includes system board and 64MB 100MHz ECC SDRAM

<sup>7</sup> For additional rack accessories and kits, please see the *HP NetServer Rack Configuration Guide* or <http://www.hp.com/netserver/products/racks>. Use HP NetServer Rack Assistant to configure your complete rackmounted solution.

## LC 3 Hot-Swap Drive Model





## Specifications

Operating Temperature	41 to 95 degrees F (5 to 35 degrees C)
Operating Humidity	20% to 80% noncondensing
Acoustic Emissions	Sound pressure (LpA): <55 dB(A), bystander position
Power Supply	Auto-ranging 90 to 240 VAC at 47–63Hz
Power Availability	350W maximum
Power Consumption	470W; recommended UPS 700VA and 1000VA
System Dimensions	21.7"H x 8.5"W x 20.8"D (552mm H x 217mm W x 527mm D)
System Weight	46-60lbs (21-27.5kg), depending on configuration

## Choose Your HP NetServer LC 3

	Model	Storage	Processor	ECC Memory	HDD	Product No*
HP NetServer LC 3 PII/400	Model 1	Hot-Swap	Pentium II 400MHz	64MB	None	D6125A
HP NetServer LC 3 PII/400	Model 4	Hot-Swap	Pentium II 400MHz	64MB	4.2GB	D6126T
HP NetServer LC 3 PII/450	Model 1	Hot-Swap	Pentium II 450MHz	64MB	None	D7028A
HP NetServer LC 3 PII/450	Model 9	Hot-Swap	Pentium II 450MHz	64MB	9.1GB	D7030T
HP NetServer LC 3 PIII/500	Model 1	Hot-Swap	Pentium III 500MHz	64MB	None	D7126A
HP NetServer LC 3 PIII/550	Model 1	Hot-Swap	Pentium III 550MHz	64MB	None	D8591A

\* Product availability varies from country to country. Please check with your reseller for details.

## HP Select Express Program:

HP NetServer LC 3 is also available through HP Select Express Program. This program offers custom integration of HP hardware offered at HP's lowest price. For more information visit our Web site at:  
<http://www.hp.com/netserver/products/sep>.



[www.hp.com/go/netserver](http://www.hp.com/go/netserver)

## For the latest information

HP NetServer Web site	<a href="http://www.hp.com/go/netserver">http://www.hp.com/go/netserver</a>
HP NetServer FTP Site	<a href="ftp://ftp.hp.com/pub/servers">ftp://ftp.hp.com/pub/servers</a>
HP Fax Response system	1-208-344-4809 (available worldwide, fax only)

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